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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,504	05/08/2001	Theodore F. Vaida	01-036	2218
24319	7590	09/13/2007		
LSI CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			EXAMINER DUONG, DUC T	
			ART UNIT	PAPER NUMBER
			2616	
			MAIL DATE	DELIVERY MODE
			09/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/851,504	<b>Applicant(s)</b> VAIDA ET AL.	
	<b>Examiner</b> Duc T. Duong	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-17 and 19-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-42 is/are allowed.
- 6) ☒ Claim(s) 1-7,9-17,19,20,43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-17, 19, 20, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starr et al (US Patent 6,807,581 B1) in view of Pandya et al (US Patent 6,792,502 B1).

Regarding to claims 1 and 11, Starr discloses a programmable network application specific integrated circuit 700 (fig. 15 col. 20 lines 25-27), comprising a media access controller 722-728 configured to transmit and receive network data (fig. 15 col. 20 lines 61-67 and col. 21 lines 1-7); a programmable logic core 780 (fig. 15 col. 21 lines 43-47) having an arithmetic logic unit 902 (fig. 17C col. 24 lines 6-8) that are dynamically configurable to implement a plurality of application level functions capable of generating meta-data (col. 21 lines 56-59), said programmable logic core 780 configured to interface with said media access controller 722-728 and implement least one said plurality of application level functions (col. 32 lines 18-39).

Starr fails to teach for an array of arithmetic logic units.

However, Pandya discloses a processor 310 comprising a plurality arithmetic logic units ALUs (fig. 8 col. 12 lines 19-24).

Thus, it would have been obvious to a person of ordinary skill in the art to arrange for a plurality of arithmetic logic units ALUs as taught by Pandya in Starr's system to speed up or/and enhance the processor functions.

Regarding to claims 2 and 12, Starr discloses the programmable logic core 780 may be programmed while said least one application level function executing (col. 22 lines 23-26).

Regarding to claims 3, and 13, Starr discloses the programmable network application specific integrated circuit 700 comprising a data interconnect subsystem 756 configured to transmit and receive said network data from said MP-block (fig. 15 col. 21 lines 32-33) and a function master subsystem 740 configured to receive said meta-data from said MP-block and dynamically program said programmable logic units 780 (fig. 15 col. 22 lines 1-15).

Regarding to claims 4 and 14, Starr discloses the data interconnect system 756 is further configured to transmit and receive said network data from a host system 20 (fig. 1 col. 5 lines 9-13).

Regarding to claims 5 and 15, Starr discloses the function master subsystem 740 is configured to transmit said meta-data to a host system 20 and capable of receiving programming instructions from said host system 20 (fig. 1 col. 6 lines 15-39).

Regarding to claims 6 and 16, Starr discloses the function master subsystem 350 is capable of programming said programmable logic core 310 based upon said meta-data (fig. 1 col. 6 lines 40-57).

Regarding to claim 7 and 17, Starr discloses the function master subsystem 740 is capable of programming said programming logic core based upon said network data (fig. 1 col. 6 lines 58-67).

Regarding to claims 9 and 19, Starr discloses at least one application level function is a validation of packet (col. 6 lines 58-63).

Regarding to claims 10 and 20, Starr discloses the programmable logic core 700 includes a management interface 732-738 configured to control and manage said media access controller 722-728 (fig. 15 col. 21 lines 8-19).

Regarding to claim 43, Starr discloses the arithmetic logic units are register transfer level (RTL) configurable (fig. 17C col. 24 lines 8-10).

Regarding to claim 44, Starr discloses at least one application level function is a content based addressing (col. 6 lines 58-63).

### ***Response to Arguments***

3. Applicant's arguments filed June 21, 2007 have been fully considered but they are not persuasive. Regarding to applicant's argument on page 14, Pandya fails to teach for a plurality of ALU's. In response, the examiner would like to direct applicant to the previously cited col. 12 lines 19-24. Herein, Pandya does not only explicitly discloses of "at least one" ALU as asserted by applicant, but also a plurality of ALUs specifically in col. 12 lines 21-22. Regarding to applicant's argument on pages 14-15, the plurality of ALUs in Pandya does not read on "an **array** of arithmetic logic units" as claimed. In response, the examiner would like to point out the word "array" by definition is just a collection or a large group of quantity of things. In this instant, the broadest

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interpretation is given to the word **array** as a **plurality** of arithmetic logic units. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an array of dynamically configurable arithmetic logic units contains an array of 16 (4x4) hex blocks) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, based on the reasons set forth here the rejections are maintained.

***Allowable Subject Matter***

4. Claims 21-42 are allowed.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD  
DD

  
9/10/07  
WING CHAN  
SUPERVISORY PATENT EXAMINER